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WHAT IS CLAIMED IS:

fig. 12E

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1. A semiconductor device comprising:
a substrate having a front surface and a rear surface;
an insulating film comprising aluminum nitride provided on
said rear surface of the substrate; and
a transistor provided over said front surface of the substrate,
said transistor having at least a channel formation region comprising
crystalline silicon, a gate insulating film adjacent to said channel formation
region, and a gate electrode adjacent to said channel formation region with
said gate insulating film interposed therebetween.

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fig. 12E

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2. A semiconductor device comprising:
a substrate having a front surface and a rear surface;
[an insulating film comprising aluminum, nitrogen and oxygen]
provided on said rear surface of the substrate; and
a transistor provided over said front surface of the substrate,
said transistor having at least a channel formation region comprising
crystalline silicon, a gate insulating film adjacent to said channel formation
region, and a gate electrode adjacent to said channel formation region with
said gate insulating film interposed therebetween.

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fig. 12E

3. A semiconductor device comprising:
a substrate having a front surface and a rear surface;
an insulating film comprising aluminum nitride provided on
said rear surface of the substrate; and

a transistor provided over said front surface of the substrate,
said transistor having at least a channel formation region comprising
crystalline silicon, a gate insulating film adjacent to said channel formation
region, and a gate electrode adjacent to said channel formation region with
said gate insulating film interposed therebetween,

wherein said insulating film comprising aluminum nitride has
a thermal conductivity of 0.6 W/cm·K or higher.

4. A semiconductor device comprising:

a substrate having a front surface and a rear surface;

[a multi-layer insulating film provided on said rear surface of
the substrate and comprising an aluminum nitride layer and a silicon oxide
layer], said aluminum nitride layer and said silicon oxide layer being
provided adjacent to each other; and

a transistor provided over said front surface of the substrate,
said transistor having at least a channel formation region comprising
crystalline silicon, a gate insulating film adjacent to said channel formation
region, and a gate electrode adjacent to said channel formation region with
said gate insulating film interposed therebetween.

5. An active matrix type liquid crystal display comprising:

a substrate having a front surface and a rear surface;

an insulating film comprising aluminum nitride provided on
said rear surface of the substrate; and

a transistor provided over said front surface of the substrate,
said transistor having at least a channel formation region comprising
crystalline silicon, a gate insulating film adjacent to said channel formation

region, and a gate electrode adjacent to said channel formation region with said gate insulating film interposed therebetween.

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fig. 12E

6. An active matrix type liquid crystal display comprising:
a substrate having a front surface and a rear surface;
[an insulating film comprising aluminum, nitrogen and oxygen]
provided on said rear surface of the substrate; and
a transistor provided over said front surface of the substrate,
said transistor having at least a channel formation region comprising
crystalline silicon, a gate insulating film adjacent to said channel formation
10 region, and a gate electrode adjacent to said channel formation region with
said gate insulating film interposed therebetween.

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fig. 12E

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7. An active matrix type liquid crystal display comprising:
a substrate having a front surface and a rear surface;
an insulating film comprising aluminum nitride provided on
said rear surface of the substrate; and
a transistor provided over said front surface of the substrate,
said transistor having at least a channel formation region comprising
crystalline silicon, a gate insulating film adjacent to said channel formation
20 region, and a gate electrode adjacent to said channel formation region with
said gate insulating film interposed therebetween, wherein said insulating
film comprising aluminum nitride has a thermal conductivity of 0.6
W/cm·K or higher.

fig. 12E

8. An active matrix type liquid crystal display comprising:
a substrate having a front surface and a rear surface;

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[a multi-layer insulating film provided on said rear surface of the substrate and comprising an aluminum nitride layer and a silicon oxide layer, said aluminum nitride layer and said silicon oxide layer being provided adjacent to each other; and

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a transistor provided over said front surface of the substrate, said transistor having at least a channel formation region comprising crystalline silicon, a gate insulating film adjacent to said channel formation region, and a gate electrode adjacent to said channel formation region with said gate insulating film interposed therebetween.

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9. An active matrix type liquid crystal display comprising:

a substrate having an insulating film comprising aluminum nitride outside said substrate, and having a transistor inside said substrate,

wherein said transistor has at least a channel formation region comprising crystalline silicon, a gate insulating film adjacent to said channel formation region, and a gate electrode adjacent to said channel formation region with said gate insulating film interposed therebetween.

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10. The device of claim 1 wherein said substrate is a glass substrate.

11. The device of claim 2 wherein said substrate is a glass substrate.

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12. The device of claim 3 wherein said substrate is a glass substrate.

13. The device of claim 4 wherein said substrate is a glass substrate.

14. The display of claim 5 wherein said substrate is a glass substrate.

15. [The display] of claim 6 wherein said substrate is a glass substrate.

16. [The display] of claim 7 wherein said substrate is a glass substrate.

17. [The display] of claim 8 wherein said substrate is a glass substrate.

18. The display of claim 9 wherein said substrate is a glass substrate.

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